Remarks

Claims 1-17 were pending in the application when last examined, of which Claims 1-3 and 12 stand rejected. Claims 1-4 and 8-11 are amended. Claims 18 and 19 are newly added.

Specification

The title has been changed. Its scope is commensurate with the preambles of the claims.

Typographical errors various portions of the Specification have been corrected.

Drawing

A replacement sheet for FIG. 4D is submitted herewith to correct a typographical error from "DDC" to "DCC."

Claim Objections

Claim 1 was objected to for a missing article. Claim 1 has been amended to delete the objected portion.

Claim Rejections – 35 USC § 103

Claims 1, 3, and 12 are rejected under 35 USC 103(a) as being unpatentable over U.S. Published Patent Application No. 2003/0080932 to Konno et al. ("Konno") in view of U.S. Published Patent Application No. 2001/0043181 to Park ("Park").

Claim 1 is patentable over Konno and Park at least because it recites, "determining image types of images represented by the image data in two adjacent frames during a first period based on the difference in the image data between two adjacent frames during a second period ...." As described in page 10, lines 4-15, the line flag counter counts the number of pulses in the line flag signal LFS that is received from the pixel flag counter, determines whether the state of the present frame is different from the state of the previous frame, and generates a frame flag signal FFS. As described in page 10, line 22 – page 11, line 2, the frame state detector 624 uses this frame flag signal FFS received from the line flag counter 623 to generate an image type detection signal MS_SEL. A certain number of frames (e.g., five frames) are grouped together to form a "filtering period," and the filtering periods are separated by a given number of frames that form an interval period (e.g., twenty-five frames), as shown in FIG. 4D. If the image type detection signal MS_SEL

is "high" for any frame in the filtering period, the signal controller 600 regards the image represented by the image data during the following interval period and the next filtering period as motion image.

In contrast, Konno uses a motion image/still image discrimination circuit 114 that compares the image signals stored in two frame memories 103A and 103B to determine whether a current image is a motion image or a still image (Konno, paragraph 142). In other words, Konno compares signals in two frames to determine the image type. There is no teaching or suggestion in Konno to use filtering periods separated by interval periods. Likewise, there is no teaching or suggestion in Konno to determine the image type during a filtering period and to determine the image type during an interval period based on the image type for the filtering period, wherein the image type for the filtering period are decided by comparing present and previous frames. Park, which discloses a gray voltage generator generating a plurality of gray voltages and a source driver selecting data voltages from the gray voltages (Park, paragraph 38), does not teach or disclose using filtering periods separated by interval periods or determining the image type during the interval period based on the image type during the filtering period. Thus, Konno and Park, even in combination, fail to teach all the elements of Claim 1.

Furthermore, Claim 1 is patentable over Konno and Park for the additional reason that it recites "suspending image data modification during a predetermined period if the image types of images during the interval period are determined to be still images." Konno, upon determining whether the image is a motion image or a still image, changes the lighting timing of the illuminator (Konno, paragraph 143). In Konno, there is no teaching or suggestion to suspend or perform ***image data modification*** based on the image type that is determined. Park fails to teach doing anything in response to image type determination, since distinguishing motion images and still images is not part of Park's teaching.

For the above reasons, Claim 1 is patentable over Konno and Park.

Claims 3 and 12 depend from Claim 1 and are therefore patentable over Konno and Park for at least the same reasons as Claim 1. Claims 4-11 depend from Claim 1 and are therefore also patentable over Konno and Park.

Claim 2 is rejected under 35 USC 103(a) as being unpatentable over Konno, Park, and Applicants' Admitted Prior Art ("AAPA"). The rejection of Claim 2 is based on the assumption

that Konno and Park teach all the elements of Claim 1 from which Claim 2 depends, and that AAPA teaches the extra elements recited in Claim 2. However, as explained above, Konno and Park fail to teach all the elements of Claim 1. Furthermore, the elements of Claim 1 such as the use of filtering period and interval period, the determination of the image type for an interval period based on the image type for a filtering period, and the suspension of image data modification based on image type of the interval period are not taught or suggested in AAPA. Hence, Claim 2 is patentable over Konno, Park, and AAPA.

For the foregoing reasons, Claims 1-19 are now in condition for allowance. Please telephone the undersigned attorney at (408) 392-9250 if there are any questions.

Respectfully submitted,

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